

# VCU-RRTC on Employment of People with Physical Disabilities

Research Study #1: Identifying What People with Physical Disabilities Want and Need to Know About Employment: A Mixed Methods Research Study



## EMPLOYMENT OUTCOMES FOR INDIVIDUALS WITH CEREBRAL PALSY: VOCATIONAL REHABILITATION RSA 911 CLOSURE DATA FY 2011, 2012, & 2013

### Introduction

Individuals with cerebral palsy (CP) face a number of physical and structural barriers in achieving an employment outcome. Vocational Rehabilitation (VR) services through the use of the federal and state VR programs is one option for obtaining the needed supports that lead to successful competitive employment outcomes. Using the Federal Rehabilitation Services Administration's (RSA) 911-database, information on individuals with a primary or secondary disability of cerebral palsy were obtained for those participants whose cases were closed during FY 2011, 2012, and 2013. This includes those participants whose cases were closed in Status 08, 28, 26, and 30.

- Status 08: An individual was found to be not eligible for services
- Status 28: Unsuccessful, case closed after implementing an Individualized Plan for Employment (IPE) without achieving an employment outcome.
- Status 30: Unsuccessful, case closed after eligibility determination but before implementing an IPE.
- Status 26: Successful rehabilitation, employment outcome achieved.

This brief focuses primarily on general demographic characteristics, education, and reasons for case closure information for all applicants with a primary or secondary disability of CP closed by VR during the report period. In addition, a more detailed analysis of data of services received, employment outcomes, and costs for individuals for whom an Individual Plan for Employment (IPE) is provided for those individuals closed in Status 26 and Status 28. The intent of this research brief is to profile participation, services received, and outcomes achieved by individuals with CP whose cases were closed in State VR programs during 2011, 2012, and 2013.

### Demographic Information for FY 2011, 2012, & 2013

To be included in this analysis, applicants must have (a) had cerebral palsy as their primary disability or secondary disability, (b) been age 25 to 64 years at the time they applied for services, and (c) applied for services from a general or combined VR agency located in the fifty states. For 2011, 2012, and 2013, 1,758,487 applicants with disabilities had their cases officially closed by VR. Of this number, less than 1% were individuals who had a primary or secondary disability of CP. During this time, 6,753 cases were closed for participants with a primary disability of CP, and 1,590 cases were closed for participants with a secondary disability of CP.

In each year, there were more cases closed for male than female participants. The sample included primarily individuals who identified as white/Caucasian with the next largest group as African American. Very small percentages in each year were individuals who were Native American, Asian, Pacific Islanders, or Hispanic or Latina. Table 1 on the following page provides specific details regarding demographic characteristics in each year for case closures.



TABLE 1

## Demographic Information for VR Participants with CP as a Primary and Secondary Disability

Demographic Data Categories CP as a Primary Disability	FY 2011 n=2,212	FY 2012 n=2,196	FY 2013 n=2,345	Demographic Data Categories CP as a Secondary Disability	FY 2011 n=596	FY 2012 n=496	FY 2013 n=498
Male	55.0%	57.1%	57.3%	Male	60.2%	58.5%	55.8%
Female	45.0%	42.9%	42.7%	Female	39.8%	41.5%	44.2%
White/Caucasian	80.0%	80.9%	79.7%	White/Caucasian	82.7%	83.7%	82.1%
African American	17.2%	16.6%	17.9%	African American	14.3%	13.9%	15.0%
Native American	0.9%	2.3%	1.2%	Native American	1.5%	0.8%	1.6%
Asian	0.9%	1.5%	2.3%	Asian	2.2%	2.0%	1.6%
Pacific Islander	0.8%	0.3%	0.3%	Pacific Islander	0.8%	0.6%	0.4%
Hispanic or Latino	6.9%	7.5%	6.6%	Hispanic or Latino	9.4%	5.6%	5.6%
Percent with Secondary Disabilities	51.0%	50.8%	53.1%	Mean Age at Application	37.2	38.3	38.2
Mean Age at Application	37.6	37.6	37.8	Standard Deviation: Age at Application	9.5	10.1	9.9
Standard Deviation: Age at Application	9.7	9.7	9.9				

## Primary Disability of Participants with CP as a Secondary Disability

The primary disabilities of individuals with CP as a secondary disability are located in Table 2. An intellectual disability was the most frequent primary disability with 46.4% in FY 2011, 39.7% in FY 2012, and 44.8% in FY 2013. Congenital conditions or birth injury were the second most frequent primary disability for those who had CP as a secondary disability.

TABLE 2

## Primary Disability of Participants with CP as a Secondary Disability

Primary Disability	FY 2011 n=596	FY 2012 n=496	FY 2013 n=498
Intellectual Disability	46.4%	39.7%	44.8%
Congenital Condition or Birth Injury	15.0%	14.9%	14.3%
Depression or Mood Disorders	8.1%	7.9%	9.2%
Specific Learning Disability	4.2%	5.8%	3.8%
Epilepsy	4.0%	2.4%	3.0%
Physical Disorders Not Listed Elsewhere	3.2%	4.8%	2.2%
Accident/Injury other than TBI or SCI	2.5%	1.0%	1.6%
Other Disability	16.6%	23.5%	21.1%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

## Education at Application

There are a number of noticeable differences in the education level at time of application for those participants with CP as a primary disability and those with CP as a secondary disability. As noted in Table 2 above, close to half of the individuals with CP as a secondary disability had a primary intellectual disability. The majority of the individuals with CP as a primary disability in this sample were at least high school graduates at the time of application. Receipt of a Special Education Certificate as the highest level of education occurred with approximately 1/4th for the individuals with a CP as a secondary disability, a rate twice that of individuals with CP as a primary disability. The percentage of individuals with CP as a secondary disability who participated in various post-secondary education opportunities was consistently lower than participation by those with CP as a primary disability as seen below in Table 3.

TABLE 3

## Level of Education at Application

Education Level Completed with CP Primary	FY 2011 n=2,212	FY 2012 n=2,196	FY 2013 n=2,345	Education Level Completed with CP Secondary	FY 2011 n=596	FY 2012 n=496	FY 2013 n=498
No Formal Schooling	0.5%	0.4%	0.2%	No Formal Schooling	1.0%	1.0%	1.2%
Grades 1-8	0.9%	1.0%	0.8%	Grades 1-8	1.7%	1.4%	1.6%
Grades 9-12	6.2%	6.2%	5.8%	Grades 9-12	7.2%	6.0%	6.8%
SPED Certificate	12.0%	10.9%	10.5%	SPED Certificate	27.6%	27.2%	24.3%
HS graduate	36.3%	36.5%	36.3%	HS graduate	38.7%	37.3%	39.4%
Post-Secondary, no degree	15.2%	15.3%	16.5%	Post-Secondary, no degree	8.9%	10.1%	9.4%
Associate's Degree	10.9%	11.2%	11.3%	Associate's Degree	6.4%	8.1%	7.2%
Bachelor's Degree	13.8%	13.1%	13.9%	Bachelor's Degree	6.4%	7.7%	7.6%
Master's Degree or Higher	4.3%	5.4%	4.7%	Master's Degree or Higher	2.2%	1.2%	2.4%
<b>Total</b>	<b>100.1%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>Total</b>	<b>100.1%</b>	<b>100.0%</b>	<b>99.9%</b>

## Status of Participants at Point of Case Closure by VR

Tables 4 and 5 presents information on participants with CP as a primary or secondary disability in this sample. Approximately one in every four VR applicants with CP as primary disability terminated after being found eligible but before an IPE was signed. A very small percentage who applied for services exited as an applicant, exited during or after a trial work experience, or exited from an order of selection waiting list. In addition, the percentage for individuals who had a signed IPE but exited before receiving services was very small. The majority of participants with CP as a primary disability in this sample exited after a signed IPE was implemented. This includes individuals who exited with or without an employment outcome. For all three years, approximately one third of the individuals with a primary disability of CP exited the VR system with an employment outcome consistent with their IPE. These individuals were considered a successful rehabilitation by VR agencies. Conversely, approximately two thirds of individuals with CP as a primary disability exited the VR system without an employment outcome.

In comparison, Table 5 presents information on participants with CP as a secondary disability during this time. The percentages for individuals with CP as a secondary disability are consistent for participants with CP as a primary disability except for Status 26, successfully closed with an employment outcome. Almost 40% of the participants with CP as a secondary disability exited the VR system with an employment outcome consistent with their IPE.

TABLE 4

### Summary of Exit Categories of VR Case Closure with CP as Primary Disability

Reasons for Case Closure	FY 2011 n=2,212	FY 2012 n=2,196	FY 2013 n=2,345
Exited as an applicant	6.0%	6.5%	5.8%
Exited during or after a trial work experience	1.8%	1.8%	1.7%
Exited from an order of selection waiting list	0.7%	0.6%	1.1%
Exited without an employment outcome, after eligibility, but before an IPE was signed	22.9%	26.3%	23.9%
Exited without an employment outcome, after a signed IPE but before receiving services	2.0%	1.6%	2.3%
Exited without an employment outcome, after signing an IPE and receiving services (Status 28)	32.4%	27.0%	31.0%
Successfully exited with an employment outcome (Status 26)	34.2%	36.1%	34.2%

TABLE 5

### Summary of Exit Categories of VR Case Closure with CP as Secondary Disability

Reasons for Case Closure	FY 2011 n=596	FY 2012 n=496	FY 2013 n=498
Exited as an applicant	4.7%	5.0%	4.0%
Exited during or after a trial work experience	2.2%	2.4%	0.8%
Exited from an order of selection waiting list	0.3%	0.8%	0.2%
Exited without an employment outcome, after eligibility, but before an IPE was signed	20.8%	22.2%	23.9%
Exited without an employment outcome, after a signed IPE but before receiving services	2.2%	1.6%	2.6%
Exited without an employment outcome, after signing an IPE and receiving services (Status 28)	30.0%	30.0%	29.5%
Successfully exited with an employment outcome (Status 26)	39.8%	38.3%	39.0%

## Rehabilitation Rate

RSA calculates a "Rehabilitation Rate" to measure outcome performance for VR Agencies. The Rehabilitation Rate is calculated by dividing the total number of Status 26 by the sum total of the Status 26 and Status 28 closures. The Rehabilitation Rate for individuals with a primary disability of cerebral palsy was 51.4% in FY 2011; 57.2% in FY 2012; and 52.5% in FY 2013. The Rehabilitation Rate for individuals with a secondary disability of cerebral palsy was 57.0% in FY 2011; 56.0% in FY 2012; and 56.9% in FY 2013. Table 6 below presents the information on the Rehabilitation Rate for individuals with CP in this sample.

TABLE 6

### Status at Case Closure for Participants with CP as a Primary or Secondary Disability who had an IEP Implemented

Status at Case Closure CP as Primary	FY 2011 n=2,212	FY 2012 n=2,196	FY 2013 n=2,345	Status at Case Closure CP as Secondary	FY 2011 n=596	FY 2012 n=496	FY 2013 n=498
Exited without an employment outcome, after signing an IPE and receiving services (Status 28)	n=717	n=593	n=730	Exited without an employment outcome, after signing an IPE and receiving services (Status 28)	n=179	n=149	n=194
Successfully Exited with an Employment Outcome (Status 26)	n=758	n=793	n=805	Successfully Exited with an Employment Outcome (Status 26)	n=237	n=190	n=194
Rehabilitation Rate (Status 26 divided by the sum of Status 26+28)	51.4%	57.2%	52.5%	Rehabilitation Rate (Status 26 divided by the sum of Status 26+28)	57.0%	56.0%	56.9%
Success Rate of All Closed Applicants (% of all applicants closed who were closed in employment)	34.2%	36.1%	34.2%	Success Rate of All Closed Applicants (% of all applicants closed who were closed in employment)	39.8%	38.3%	39.0%

## Reasons for VR Case Closure: All Applicants

Table 7 below presents information on the reasons that cases were closed for individuals with CP who were terminated from VR services during FY 2011, 2012, or 2013. The reasons for closures remained mostly consistent over the three fiscal years. The most frequent reasons for closure included 1) employment outcome achieved, 2) refused services, 3) unable to locate, or 4) failure to cooperate. A very small percentage of cases (approximately 3% each year) were closed as being too disabled to benefit from services.

TABLE 7

### Reasons for VR Case Closure: All Applicants

Reasons for VR Case Closure: CP as Primary	FY 2011 n=2,212	FY 2012 n=2,196	FY 2013 n=2,345	Reasons for VR Case Closure: CP as Secondary	FY 2011 n=596	FY 2012 n=496	FY 2013 n=498
Employment Outcome Achieved	34.2%	36.1%	34.2%	Employment Outcome Achieved	39.8%	38.3%	39.0%
Refused Services	19.4%	19.0%	20.6%	Refused Services	17.1%	21.0%	18.3%
Unable to Locate	14.3%	13.4%	13.9%	Unable to Locate	10.9%	10.5%	9.0%
Failure to Cooperate	10.2%	9.7%	10.7%	Failure to Cooperate	7.9%	6.5%	8.0%
Too Disabled	2.6%	3.3%	2.9%	Too Disabled	4.4%	3.0%	3.2%
Transferred to Another Agency	1.8%	1.9%	1.6%	Transferred to Another Agency	2.9%	3.6%	3.8%
Death	.5%	.3%	.5%	Death	0%	.8%	.8%
Institutionalized	.2%	.2%	.2%	Institutionalized	.3%	.4%	.8%
Transportation Not Available	.5%	.3%	.5%	Transportation Not Available	.5%	0%	.2%
All Other Reasons	15.0%	14.6%	14.3%	All Other Reasons	14.9%	14.5%	15.3%
Sheltered Employment	.1%	.1%	0%	Sheltered Employment	.2%	.2%	.6%

## Demographic Information on VR Participants with CP Closed in Employment (Status 26)

Approximately 57-58% of the participants with CP as a primary disability who successfully achieved an employment outcome were male. In addition, 59% to 63% of the participants with CP as a secondary disability who successfully achieved an employment outcome were male. This finding is consistent with the information presented in Table 1 with the percentage of males for all cases closed during these years exceeding females for participants who had CP as a primary and secondary disability. The majority of the individuals whose cases were closed in Status 26 during this time were white/Caucasian followed by individuals who were African American. Very few cases were closed successfully in Status 26 for individuals reported as Native American, Asian, Pacific Islander, or participants who were Hispanic or Latino. This also is consistent with the data in Table 1 since the minority of the participants fell into these categories for all cases closed during FY 2011, 2012, and 2013. More information is in Table 8 below.

TABLE 8

### Demographic Information for VR Participants with CP as Primary or Secondary Disability Closed with an Employment Outcome Achieved (Status 26)

Demographic Data Categories CP as Primary	FY 2011 n=2,212	FY 2012 n=2,196	FY 2013 n=2,345	Demographic Data Categories CP as Secondary	FY 2011 n=596	FY 2012 n=496	FY 2013 n=498
Male	57.6%	58.1%	56.7%	Male	63.3%	58.9%	58.8%
Female	43.5%	41.9%	43.3%	Female	36.7%	41.1%	41.2%
White/Caucasian	84.0%	84.5%	83.9%	White/Caucasian	85.2%	90.0%	84.5%
African American	14.3%	12.5%	13.6%	African American	11.4%	8.9%	12.4%
Native American	0.7%	1.4%	0.6%	Native American	2.5%	1.1%	0.5%
Asian	1.6%	2.3%	2.1%	Asian	1.7%	1.6%	2.1%
Pacific Islander	0.4%	0.3%	0.4%	Pacific Islander	0.4%	0.0%	1.0%
Hispanic or Latino	6.6%	7.8%	5.5%	Hispanic or Latino	11.0%	5.8%	5.2%

## Services Received by VR Participants Who's Cases were Closed in Status 26

Tables 9 and 10 on the following page present the primary services received through VR for cases closed in Status 26 during FY 2011, 2012, or 2013. Assessment, VR counseling and guidance, job placement assistance, on-the-job supports, and diagnosis and treatment were the five primary services received for participants with CP as a primary disability (Table 9) and CP as a secondary disability (Table 10).



10). A higher percentage of individuals with a secondary disability of CP received supported employment services than those with CP as primary disability. This was true for on-the-job supports. The findings may be a result of the high percentage of participants who had intellectual disability as their primary disability and CP as their secondary disability. A higher percentage of individuals with CP as a primary disability received Rehabilitation Technology than those with CP as a secondary.

TABLE 9

**Services Received by Participants with CP as Primary Disability Closed with an Employment Outcome Achieved (Status 26)**

VR Services Received CP as Primary	FY 2011 n=758	FY 2012 n=793	FY 2013 n=805	VR Services Received CP as Primary	FY 2011 n=758	FY 2012 n=793	FY 2013 n=805
VR Counseling and Guidance	68.0%	66.8%	64.9%	Information and Referral	23.9%	22.7%	22.5%
Assessment	64.6%	64.3%	64.4%	Supported Employment	20.9%	20.5%	22.7%
Job Placement Assistance	51.7%	51.6%	51.9%	Maintenance	15.2%	12.5%	15.4%
Job Search Assistance	32.6%	35.1%	34.5%	Job Readiness Training	14.1%	15.1%	14.4%
On-the-Job Supports	32.6%	32.5%	35.4%	Miscellaneous Training	8.7%	9.2%	10.2%
Diagnosis and Treatment	30.0%	31.4%	31.4%	Occupational/Vocational Training	7.4%	8.2%	6.5%
Other Services	32.5%	32.3%	28.9%	College or University Training	7.0%	7.7%	6.01%
Rehabilitation Technology	26.6%	26.6%	24.9%	On-the-Job Training	4.1%	5.2%	5.2%
Transportation	26.6%	30.4%	30.3%				

TABLE 10

**Services Received by Participants with CP as Secondary Disability Closed with an Employment Outcome Achieved (Status 26)**

VR Services Received CP as Primary	FY 2011 n=758	FY 2012 n=793	FY 2013 n=805	VR Services Received CP as Primary	FY 2011 n=758	FY 2012 n=793	FY 2013 n=805
VR Counseling and Guidance	74.3%	70.0%	61.3%	Information and Referral	24.1%	16.8%	21.1%
Assessment	65.4%	63.2%	63.9%	Rehabilitation Technology	15.6%	18.4%	16.5%
Job Placement Assistance	57.0%	54.7%	57.7%	Job Readiness Training	14.3%	17.9%	14.9%
On-the-Job Supports	55.7%	55.3%	61.3%	Maintenance	8.9%	9.5%	15.4%
Supported Employment	48.1%	43.7%	50.0%	Miscellaneous Training	8.9%	7.4%	5.2%
Job Search Assistance	35.9%	36.3%	33.0%	Interpreter	8.9%	6.8%	4.1%
Diagnosis and Treatment	34.2%	34.2%	31.4%	Occupational/Vocational Training	4.6%	3.7%	1.5%
Other Services	30.8%	21.1%	27.3%	On-the-Job Training	4.5%	3.2%	2.6%
Transportation	26.2%	17.4%	25.3%				

**Receipt of Supplemental Security Income (SSI) and Social Security Disability Income (SSDI) at Application and Closure (Status 26)**

Table 11 below presents information on SSI and SSDI recipients at application and at case closure for individuals closed in Status 26. The percentage of SSI recipients with CP as a primary disability at application showed almost no difference across the three years. SSI receipt at time of closure decreased slightly from point of application to point of closure for individuals with CP as their primary disability. Information is not available on reductions in SSI payment amounts from point of application to point of termination resulting in employment.

TABLE 11

**SSI and SSDI Receipt Status at Application and Closure for Individuals with CP as a Primary or Secondary Disability Whose Cases Were Closed in Status 26 (employment)**

SSI Receipt Status: CP as Primary	FY 2011	FY 2012	FY 2013	SSDI Receipt Status: CP as Primary	FY 2011	FY 2012	FY 2013
SSI Receipt at Application	30.2%	30.7%	30.8%	SSDI Receipt at Application	30.1%	34.6%	34.7%
SSI Receipt at Closure	29.5%	27.3%	28.6%	SSDI Receipt at Closure	35.3%	39.9%	36.0%
SSI Receipt Status: CP as Secondary	FY 2011	FY 2012	FY 2013	SSDI Receipt Status: CP as Secondary	FY 2011	FY 2012	FY 2013
SSI Receipt at Application	44.1%	33.7%	40.9%	SSDI Receipt at Application	39.0%	36.3%	40.9%
SSI Receipt at Closure	44.8%	37.1%	36.1%	SSDI Receipt at Closure	46.1%	37.8%	41.2%

Receipt of SSI at application shows a higher percentage of individuals with CP as a secondary disability receiving SSI at application across the three years than those with CP as a primary disability. In addition, there was some variation in percentages of people receiving SSI at case closure across the time studied. SSI receipt at time of closure compared to point of application also varied, increasing slightly except for FY 2013. In FY 2013, the percentage receiving SSI at closure for individuals with CP as a secondary disability dropped from the point of application to point of closure.

The percentage of individuals with CP as a secondary disability receiving SSDI at application versus at closure increased across all three years. The smallest increase occurred in FY 2013. The percentage of individuals with CP as a secondary disability closed in employment receiving SSDI at application varied between a low of 36.3% in FY 2012 and a high of 40.9 in FY 2013. When comparing receipt of SSDI at application to closure for individuals with CP as a secondary disability, there was an increase all three years.

## Employment Outcomes for Individuals Closed in Status 26

Table 12 below presents information on hours worked per week and weekly earnings for individuals with CP who terminated VR services in employment. The average number of hours worked per week by individuals with CP as a primary disability was approximately 25 hours, which was consistent across the three years. Weekly earnings averaged close to \$300 for each of the three years included in this brief. For individuals with CP as a secondary disability, the wages and hours of weekly employment were lower. Their hours of weekly employment ranged from 19.5 to 21.6; weekly earnings ranged from \$190.31 to \$222.36. Table 13 below shows the percentage of participants closed who worked full time (35 or more hours per week) versus part time with part time employment defined as less than 35 hours per week. Clearly, more participants in this sample worked part time versus full time. For participants with CP as a primary disability, the percent working 35 or more hours a week was 28% to 35% over the report period. For participants with CP as a secondary disability, the percent working 35 or more hours a week ranged from 17.5% to 21.6% over the report period.

**TABLE 12** Earnings and Hours of Employment Outcomes for Participants with CP as Primary Disability Closed with an Employment Outcome Achieved (Status 26)

Employment Outcome CP as Primary	FY 2011 n=758	FY 2012 n=793	FY 2013 n=805
Hours Worked per Week	25.1	24.8	25.1
Weekly Earnings	\$304.21	\$300.07	\$307.39
Employment Outcome CP as Secondary	FY 2011 n=237	FY 2012 n=190	FY 2013 n=194
Hours Worked per Week	19.5	21.6	20.7
Weekly Earnings	\$190.32	\$222.36	\$205.48

**TABLE 13** Full Versus Part-Time Employment Outcomes for Participants with CP as Primary or Secondary Disability Closed with an Employment Outcome Achieved (Status 26)

Hours Worked at Closure CP as Primary	FY 2011 n=758	FY 2012 n=793	FY 2013 n=805
< 35 hours per week	65.0%	72.0%	69.0%
35+ hours per week	35.0%	28.0%	31.0%
Hours Worked at Closure CP as Secondary	FY 2011 n=237	FY 2012 n=190	FY 2013 n=194
< 35 hours per week	81.0%	78.4%	82.5%
35+ hours per week	19.0%	21.6%	17.5%

## State VR Agencies Employment Outcomes

Nationally, the percentage of individuals with CP closed in Status 26 with an employment outcome achieved relative to all closures with CP as a primary disability was 34.1% in FY 2011, 36.2% in FY 2012, and 34.1% in FY 2013. This information is found earlier in Table 5. Table 14 presents the states that had a higher percentage at or above 50% of terminations for individuals with CP as a primary disability closed in Status 26 as compared to the national success rate. State VR Agencies with a higher percentage of individuals closed with an employment outcome ranged from states with larger populations to smaller. State-level success rates are not provided for individuals with CP as a secondary disability, because of the small population numbers for this group.

**TABLE 14** States with the Highest Percent of Individuals with CP as a Primary Disability

States with the Highest Percent of Individuals with CP as a Primary Disability -- FY 2011		States with the Highest Percent of Individuals with CP as a Primary Disability -- FY 2012		States with the Highest Percent of Individuals with CP as a Primary Disability -- FY 2013	
State	Percentage	State	Percentage	State	Percentage
West Virginia	59.1% (n=22)	Pennsylvania	53.2% (n=111)	Iowa	50% (n=30)
Utah	50% (n=16)	Wyoming	62.5% (n=56)	West Virginia	55% (n=20)
Iowa	68.8% (n=16)	South Dakota	56.3% (n=16)	Vermont	50% (n=16)
Alaska	66.7% (n=6)	North Dakota	60.0% (n=10)	South Dakota	60% (n=15)
Nebraska	75.0% (n=4)	Alaska	100% (n=2)	New Hampshire	50% (n=14)
				Wyoming	63.3% (n=11)

## Discussion

As a whole, the data are consistent across the three years for individuals with CP as a primary or secondary disability. There are minor fluctuations from year to year, and it appears that the populations of individuals with CP who entered and exited the VR system for all three years were similar in terms of demographics, the services received, their interaction with the system, and rate of successful closure in employment. For participants with a primary disability of CP, approximately one-third exited with an employment outcome, Status 26. For participants with a secondary disability, a little more than one-third exited with an employment outcome during the years 2011, 2012, and 2013. In other words, approximately two-thirds of the individuals with a disability of CP exited without an employment outcome. The question is unanswered as to why this is occurring.

People with CP comprise a very heterogeneous group of individuals. CP is the most common motor disability in childhood and may affect an individual's mobility, manual dexterity, and ability to maintain balance and posture. The impact on an individual's functional abilities can range from mild to severe. For example, a person may have limitations in only one arm or leg, on one side of the body, the legs only, or have entire body involvement. An individual with mild CP may not require accommodations while another individual with severe CP will need assistive technology and personal assistance with activities of daily living. Individuals with CP may or may not experience other secondary disabilities to include speech and language limitations, intellectual disabilities, seizures, vision and hearing impairments, and learning disabilities.

It is important to note that a person with CP who has significant limitations in motor skills and speech does not necessarily have an intellectual disability. Making this assumption can lead to underestimating people's abilities and potentially limit their employment outcomes as well as the services they receive. As an example, a very small percentage of individuals with CP as a primary disability in this sample received college or university training or occupational / vocational training. An even smaller percentage of individuals with CP as a secondary disability received occupational or vocational training during this period.

Reviewing the educational level of participants with CP as a primary disability at application shows that a little more than a third of the participants entered the program as a high school graduate. The educational level of participants with CP as a secondary disability at application was slightly higher. Almost 40% of the sample was reported as being high school graduates at application. Since education is associated with employment opportunities, this finding may raise the question as to why more individuals with CP are not receiving college or university training and/or occupational training.

The age at application for the participants in this sample is higher than the typical age of students, which may account for the low percentages receiving these services. Another clue may be that over twice as many of individuals with a secondary disability of CP, both who did and did not achieved employment, received supported employment services than those with a primary disability of CP. This indicates that the nature and severity of their disabilities required more support and made college a less feasible option. Alternatively, are the expectations of professionals for the employment outcomes of individuals with CP limiting the educational opportunities offered to this group of VR participants?

It is also interesting to note that a small percentage of the participants closed successfully in employment received Rehabilitation Technology as a service. Approximately 25% of the participants received this service across the period studied for those with CP as a primary disability. In comparison, even fewer participants with CP as a secondary disability received this service. Less than 20% of these individuals across the three years received this service.

Most of the individuals with CP who achieved an employment outcome worked part time at case closure. The average number of hours worked per week by individuals with CP as a primary disability was approximately 25 hours, which was consistent across the three years. The average number of hours worked by participants with CP as a secondary disability was slightly less. The majority of participants for both groups worked less than 35 hours per week. Earnings hovered around \$300 a week for individuals with CP as a primary disability across the study period. Earnings for individuals with CP as a secondary disability were less, averaging around \$200 per week. A good percentage of both groups, whether they work full-time or part-time, have earned income below the poverty level.

There were moderate decreases for all closures for individuals with a primary and secondary disability of CP in SSI/SSDI receipt. For those with a primary disability of CP, there was a slight decrease in the receipt of SSI from the time of application to closure in employment. However, there are increases in the receipt of SSDI for individuals with a primary disability of CP (for two of the years) and in the receipt of both SSI and SSDI for those with a secondary disability of CP. One explanation is that they were 'counseled' to enroll in these programs to take advantage of their work incentives. Another explanation is that given their low wages at the time of closure, the financial benefits, and perhaps medical before benefits, provided by these programs were critical. Loss of benefits, including health care, is cited as a barrier to employment for people with disabilities and may account for the lower number of hours worked by this group of VR participants.

In conclusion, while the intent of providing vocational rehabilitation services is to help individuals with disabilities become economically self-sufficient and to reduce their dependence on Social Security benefits, this was not achieved for the majority of individuals during this period with a disability of CP. Many of their cases reached closure without an employment outcome. Others obtained employment but worked too few hours, earned too little income not to need the financial, and perhaps medical, benefits provided by Social Security.

The data presented in this research brief is descriptive and should not be used to predict employment outcomes for individuals with CP. Perhaps, the brief raises more questions than answers and provides information for a dialogue on facilitating employment for this group of underemployment or unemployed individuals. The data does provide insight into the characteristics of individuals with CP served by the state VR during the period studied.

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